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<p>(21) International Application Number: PCT/US99/03638</p> <p>(22) International Filing Date: 19 February 1999 (19.02.99)</p> <p>(30) Priority Data: 60/075,612 20 February 1998 (20.02.98) US</p> <p>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/075,612 (CIP) Filed on 20 February 1998 (20.02.98)</p> <p>(71) Applicants (for all designated States except US): XY, INC. [US/US]; ARBL Building, 3801 Rempart Road, Fort Collins, CO 80523 (US). CYTOMATION, INC. [US/US]; 4850 Innovation Drive, Fort Collins, CO 80525 (US). C.S.U.R.F. [US/US]; P.O. Box 483, Fort Collins, CO 80522 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): BUCHANAN, Kristopher, S. [US/US]; 4300 Shadowbrooke Court, Fort Collins, CO 80526 (US). HERICKHOFF, Lisa [US/US]; 5123 East County Road 52, Fort Collins, CO 80524 (US). MALACHOWSKI, George, C. [AU/US]; 1112 Remington Street,</p>		<p>Fort Collins, CO 80524 (US). OTTENBERG, Matthias, J., G. [US/US]; 3002 Indigo Court, Fort Collins, CO 80525 (US). SEIDEL, George [US/US]; 3101 Arrowhead Road, LaPorte, CO 80535 (US). FERGUSON, Douglas, H. [US/US]; P.O. Box 32, Pennock, MN 56279 (US).</p> <p>(74) Agent: SANTANGELO LAW OFFICES, P.C.; Santangelo, Luke, 3rd floor, 125 South Howes, Fort Collins, CO 80521 (US).</p> <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p>
<p>(54) Title: A VIBRATORY SYSTEM FOR A SORTING FLOW CYTOMETER</p> <div data-bbox="406 1134 1396 1680"></div> <p>(57) Abstract</p> <p>A flow cytometry system is disclosed for oscillating the exterior of a flow cytometer nozzle. Oscillating the exterior of a flow cytometer nozzle at selected oscillations or a sweeping range of oscillations disintegrates particles and gas entrapped within the flow cytometer nozzle. Adherents absorbed to the exterior of the flow cytometer nozzle may also be removed. A energy source (1) serves to generate a selected oscillation or range of oscillations. The energy source (1) is connected to a flexible transfer element (2) which conducts the electrical signals to an oscillation system (3). The oscillation system (3) turns the electrical energy from the energy source (1) into mechanical oscillations and is connected to a portable device (4) which disintegrates particles, dislocates gas within the flow cytometer nozzle and cleans the exterior of the flow cytometer aperture.</p>		

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